

SECTION 1. WATER DISTRIBUTION AND SANITARY SEWER SYSTEMS:

- 1.1 **GENERAL:** The James City Service Authority (JCSA), requires that the Hampton Roads Planning District Commission (HRPDC) Regional Construction Standards (Fifth Edition with amendments, dated December 2010), together with the JCSA Special Provisions to the Regional Construction Standards (see Appendix A) and the criteria presented in this document, be followed for the construction of all water distribution and sanitary sewer systems unless otherwise authorized by the General Manager. The Regional Construction Standards may be obtained by contacting the Hampton Roads Planning District Commission, 723 Woodlake Drive, Chesapeake, VA 23320, phone (757) 420-8300. The HRPDC Regional Construction Standards also include materials, specifications and details relating to roadway and drainage construction. The JCSA is authorizing the use of the Regional Construction Standards for construction relating to water and sanitary sewer only.

The General Manager reserves the right to waive or modify any or all parts of the Design and Acceptance Criteria in specific instances as he deems appropriate, except where Commonwealth of Virginia Department of Health *Waterworks and Sanitary Sewerage Regulations* would be violated by such a waiver. The term “General Manager” refers to the General Manager of JCSA or authorized representative. This document is a supplement to the JCSA’s Regulations Governing Utility Service. JCSA’s Chief Engineers for Water and Wastewater are responsible for the enforcement, administration, and interpretation of these Design and Acceptance Criteria.

All site and subdivision plans shall be sealed by a Professional Engineer or Land Surveyor licensed in the Commonwealth of Virginia. Plan submittals shall be accompanied by the JCSA “Water and Sanitary Sewer System Design Checklist” provided in Appendix D. The checklist can also be obtained by contacting JCSA Engineering at (757) 253-6800 or by downloading from JCSA’s website at <http://www.james-city.va.us/jcsa/index.html>. Any plans submitted without a Professional seal or a completed JCSA checklist will be returned without review.

When a Professional Engineer or Surveyor (*Professional*) with a current said professional license with the Commonwealth of Virginia prepares design documents for a specific project and incorporates the HRPDC Regional Construction Standards and/or JCSA’s Design and Acceptance Criteria for Water Distribution and Sanitary Sewer Systems into that design by reference, the *Professional’s* signed and dated seal of the particular plans, specifications and drawings for that project represents their approval of the HRPDC Regional Construction Standards and/or JCSA’s Design and Acceptance Criteria as incorporated by reference into such particular plans, specifications and drawings for such project. In other words, the *Professional* who stamps or seals any plans, specifications, reports or other documents incorporating the HRPDC Regional Construction Standards and/or JCSA’s Design and Acceptance Criteria by reference is responsible for assuring that such plans, and the HRPDC Regional Construction Standards and/or JCSA’s Design and Acceptance Criteria incorporated into such plans by reference, are adequate and appropriate for the particular project. The ultimate decision about what goes into such plans, specifications, reports, or other documents for a specific project must be that of the *Professional* who signs and seals them.

- 1.2 **DESIGN OF FACILITIES:** Design of all public gravity sanitary sewer systems to be dedicated to JCSA shall be performed by a Professional Engineer or Professional Land Surveyor with Part A and B license certified by the Commonwealth of Virginia. Water systems, pump systems, well facilities, and sanitary sewer pressure systems shall be prepared by or under the supervision of a licensed professional engineer legally qualified to practice in the Commonwealth of Virginia, and will require current Professional Engineers certification. All designs shall meet or exceed the latest edition of the Commonwealth of Virginia Department of Health *Waterworks and Sanitary Sewerage Regulations*, and the JCSA Design and Acceptance Criteria (including the HRPDC Regional Construction Standards).

Virginia Department of Health (VDH), Department of Environmental Quality (DEQ), Hampton Roads Sanitation District (HRSD) and Newport News Water Works (NNWW) approvals are required for, but not limited to, the following:

DEQ:

- All gravity sanitary sewer projects with a 40,000 gpd or greater Average Design Flow or, 100 or more connections regardless of phasing.
- All pump stations with a 20 gpm or greater pump rate.
- All pump stations discharging into a common force main with one or more other stations.
- The approval by DEQ may require a Certification by the *Professional* that all SCAT Regulation requirements are met, if DEQ does not review the project. The Certification shall be as required by the DEQ Certificate to Construct application.

VDH:

- All water mains 16-inches and larger.
- All transmission mains.
- All water production facilities (including wells).
- All master metered projects which have on-site, private water distribution piping larger than 8-inches in diameter or serving more than 14 residential connections.

HRSD:

- All gravity sanitary sewer projects with a 40,000 gpd or greater Average Design Flow or, 100 or more connections regardless of phasing.
- Any project proposing a direct connection to HRSD mains.
- Any project proposing work in proximity to existing HRSD mains.
- Any project discharging Industrial Waste.

NNWW:

- NNWW provides water to the southeastern portion of James City County from the Newport News/James City County line along Route 60 to the City of Williamsburg. This includes, but is not limited to, the Grove area, Kingsmill,
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Busch Gardens, the Anheuser-Busch Brewery and the James City County Government Complex. The Applicant shall coordinate design requirements directly with NNWW for projects within their service area.

It is the responsibility of the Applicant to coordinate submittals to and receive approval from the above agencies. A copy of the developers/engineers transmittal to these agencies, where required, shall be included as part of the site plan submittal. Agency approvals are required prior to JCSA final plan approval and issuance of a Certificate to Construct Water and Sanitary Sewer Facilities.

- 1.3 **VERTICAL AND HORIZONTAL SURVEY DATUM CONTROL:** Vertical and horizontal survey datum control shall be based upon, and referenced to, the Primary Geodetic Control Network of James City County, Virginia. Ground measurements shall be furnished in U. S. Survey Feet and reference the Virginia Coordinate System of 1983, South Zone (1986 adjustment). A minimum of one permanent bench mark that meets the requirements of the Subdivision Ordinance of James City County, Virginia shall be established for each project that is more than 2,500 linear feet from an existing and established bench mark **and/or County monumentation, and shall be clearly referenced on the site plan including the County monument used.**
- 1.4 **CONTRACTOR LICENSING:** Contractor registration shall be in accordance with Title 2.2 Chapter 43 of the Code of Virginia. The Contractor responsible for installing the water and sanitary sewer facilities will be required to provide their State Contractor's License number as part of the JCSA "Application for Certificate to Construct Water and Sanitary Sewer Facilities".